PREVALENCE AND RESISTANCE PATTERN OF ACINETOBACTER SPECIES IN A TERTIARY CARE HOSPITAL IN KANYAKUMARI DISTRICT

ABSTRACT

BACKGROUND: Acinetobacter infection has emerged as a serious threat to the healthcare system owing to the emergence of pan resistance from multi resistance.

AIMS: To Study the prevalence and resistance pattern of Acinetobacter species in a tertiary care hospital.

MATERIALS AND METHODS: A total of 3832 samples received for culture and sensitivity during 2017 january to 2018 december (1 year) were analysed. Identification of isolates was done by colony characteristics and biochemical reactions. The resistance patterns of these isolates were studied using various antibiotics by Kirby-Bauer disc diffusion test as per CLSI (Clinical Laboratory Standard Institute) guidelines.

RESULTS: Out of the total 3832 samples 1332 were culture positive samples. In that 1332 culture positive samples 89 (6.68%) isolates were identified as Acinetobacter species. Multidrug resistance was observed for 32 (35.96%), extensively Drug Resistant were 14 (15.73%) and Pan drug resistant were 11(12.36%).

CONCLUSION: Prevalence of Acinetobacter species from our study was 6.68%. Most of the isolates were sensitive to Cotrimoxazole (53.9%), Amikacin (52.8), piperacillin/ tazobactum (48.3 %). Among cephalosporins more sensitivity is for fourth generation cephalosporins (Cefipime 40.4%) . Polymixin is more sensitive than colistin. The emergence of increasingly resistant strains causing such infections has become a public health problem. Early detection is necessary for timely implementation of strict infection control practices and judicious treatment with susceptible antimicrobials.

KEY WORDS: Acinetobacter, Resistance pattern Acinetobacter, Prevalance of Acinetobacter